UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,454	11/19/2003	Kazuo Maemoto	019519-410	3925

21839 7590 10/06/2004

BURNS DOANE SWECKER & MATHIS L L P
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER	
WALKE, AMANDA C	

ART UNIT	PAPER NUMBER
1752	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/715,454	MAEMOTO, KAZUO	
	Examiner	Art Unit	
	Amanda C Walke	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *16-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/2/04, 8/19/04*.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. 8/17/04
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. This application appears to be a division of Application No. 09/756789, filed 1/10/2001. A later application for a distinct or independent invention, carved out of a pending application and disclosing and claiming only subject matter disclosed in an earlier or parent application is known as a divisional application or "division." The divisional application should set forth the portion of the earlier disclosure that is germane to the invention as claimed in the divisional application.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 16-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Teng (6,482,571).

Teng disclose an on-press developable lithographic plate comprising on a substrate a photosensitive layer and a top ultrathin ink and/or fountain solution soluble or dispersible overcoat with a coverage of 0.001 to 0.150 g/m.sup.2. The incorporation of such an ultrathin overcoat can provide excellent white light stability, high contrast, excellent ink receptivity, and fast on-press development. Various surfactants may be added into the photosensitive layer to allow or enhance the on-press ink and/or fountain solution developability. Both polymeric and small molecule surfactants can be used. However, it is preferred that the surfactant has low or no volatility so that it will not evaporate from the photosensitive layer of the plate during storage and handling. Nonionic surfactants are preferred. The nonionic surfactant used in this invention should have sufficient portion of hydrophilic segments (or groups) and sufficient portion of oleophilic segments (or groups), so that it is at least partially soluble in water (>1 g surfactant soluble in 100 g water) and at least partially soluble in organic phase (>1 g surfactant soluble in 100 g photosensitive layer). The mechanisms for the photohardening or photosolubilization of photosensitive materials may be different for different photosensitive materials and imaging radiations. For example, a certain radiation can directly cause hardening or solubilization of a certain molecule; a certain radiation can activate a certain initiator (and/or coinitiator or sensitizer) which in turn causes hardening or solubilization of a certain molecule; and a certain radiation (usually an infrared light) can be absorbed by a absorbing dye or pigment to generate heat which heat in turn indirectly (through an initiator) or directly causes hardening or solubilization of a certain molecule. It is noted that, in order to clarify and simplify the terminology of this patent, in this patent, any radiation which can directly or indirectly cause hardening or solubilization of a photosensitive material is defined as actinic radiation for that

photosensitive material. Such a radiation can be a conventional light or laser. Given the teachings of the reference, the instant claims are anticipated by Teng.

5. Claims 16 and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi et al (5,569,573).

Takahashi et al disclose a plate for thermal lithography comprising a support having coated thereon a recording layer. The recording layer comprises a hydrophilic binder polymer and microcapsules containing an oleophilic material that are converted to an image area by heat. The binder has a functional group which chemically bonds with the oleophilic material which also has a functional group. The microcapsules comprise a hydrophilic wall which separates the oleophilic material from the binder material. In order to react the oleophilic material with the binder material, the oleophilic material must be liberated from the capsules. This may be done by expansion, compression, melting, or chemical decomposition of the wall of the capsule, thus teaching that the capsules may be heat rupturable or that the material is released by the expansion or swelling of the outer wall. Alternatively, the oleophilic material (preferably a blocked isocyante compound) may be in the form of a fine powder rather than in a capsule form. The hydrophilic layer may also comprise a sensitizer to accelerate the thermal breakage of the capsule, to accelerate the reaction between the oleophilic component and the reactive material having the functional group, or the acceleration of the of the reaction of the oleophilic component and the binder polymer. There may also be a light to heat converting agent present (column 12, line 5 to column 13, line 36). The support utilized in the invention is preferably an aluminum support that has been subjected to degreasing/surface roughening, degreasing/electropolishing/anodic treatment, or the like (column 14, lines 12-30).

In column 8, lines 16-59 and column 11, lines 22-44, the reference teaches that the heat sensitive material comprising the microcapsules or fine particles may contain either a photopolymerization initiator or a thermopolymerization initiator, thus the references teaches that the materials may be cross-linked employing either heat or light, which would the present claim limitations for a fine particulate polymer incapable of combining by heat. Also, the reference teaches an additional heating or UV exposure step may be employed at a temperature less than that required to rupture the capsules to cross-link the binder polymer (in addition to the thermal printing step; column 14, lines 52-65). Given the teachings of the reference, the instant claims 16 and 18-21 are anticipated by the reference.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda C Walke whose telephone number is 571-272-1337. The examiner can normally be reached on M-R 5:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Amanda C Walke